



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/715,749	11/18/2003	Thomas Converse	129419-2	5516

7590 07/12/2005

Robert E. Walter
General Electric Company
One Plastics Avenue
Pittsfield, MA 01201

EXAMINER

GUTMAN, HILARY L

ART UNIT	PAPER NUMBER
----------	--------------

3612

DATE MAILED: 07/12/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/715,749	CONVERSE ET AL.	
	Examiner	Art Unit	
	Hilary Gutman	3612	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 20 June 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7 and 9-16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7 and 9-16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 18 November 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(a).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

3. Claims 1-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ohta in view of Evans et al.

Ohta (5,780,129) discloses an energy absorber adapted for attachment to a vehicle bumper beam R₁ for absorbing forces generated from an impact, said energy absorber comprising a blow molded thermoplastic unitary structure having a rearward facing support portion R₂ and a crushable forward projecting portion 1 adapted to crush upon impact.

With regard to claim 2, the energy absorber has an elongated shape and is adapted for mounting to the forward end of a vehicle for extending longitudinally across the width of the vehicle.

Art Unit: 3612

With regard to claim 3, the energy absorber is “adapted” for pedestrian leg protection and has a highly efficient crush mode.

With regard to claim 4, the energy absorber is “adapted” to reduce forces of impact with legs of a pedestrian.

With regard to claim 5, the energy absorber is “adapted” to absorb energy during an impact of said vehicle at low speeds of less than or equal to 5Mph.

With regard to claim 6, the energy absorber consists essentially of a single integral unit of blow molded material.

With regard to claim 7, the forwardly projecting portion comprises a plurality of forwardly projecting crushable members (generally 1a, 1b, 1c).

With regard to claim 12, the energy absorber comprises a thermoplastic resin.

With regard to claim 13, the thermoplastic resin comprises polyolefin, a polyester resin, a polycarbonate, or mixtures thereof.

With regard to claim 14, the polyester resin can be a high density polyethylene or a low density polyethylene.

With regard to claim 15, the polyester resin can be polybutylene terephthalate and the polycarbonate can apparently be an aromatic polycarbonate.

Ohta discloses the support portion apparently including an upper flange and a lower flange for attaching the energy absorber to a bumper beam but lacks a flange extending around the periphery of the support portion.

Art Unit: 3612

Evans et al. (4,397,490) teach an energy absorber having a support portion 13 and a peripheral flange extending around the periphery of the support portion for attaching the energy absorber to a bumper beam.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have provided a peripheral flange as taught by Evans et al. for the support portion of Ohta in order to allow the energy absorber to be attached to a bumper beam at points around the periphery of the support portion.

4. Claims 1-7 and 9-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tamada et al. in view of Ohta and Evans et al.

Tamada et al. (6,406,079) disclose an energy absorber 3 adapted for attachment to a vehicle for absorbing forces generated from an impact, said energy absorber comprising a blow molded thermoplastic unitary structure having a rearward facing support portion 9 and a crushable forward projecting portion 8 adapted to crush upon impact.

With regard to claim 2, the energy absorber has an elongated shape and is adapted for mounting to the forward end of a vehicle for extending longitudinally across a portion of the width of the vehicle.

With regard to claim 3, the energy absorber is “adapted” for pedestrian leg protection and has a highly efficient crush mode.

With regard to claim 4, the energy absorber is “adapted” to reduce forces of impact with legs of a pedestrian.

With regard to claim 5, the energy absorber is "adapted" to absorb energy during an impact of said vehicle at low speeds of less than or equal to 5Mph.

With regard to claim 6, the energy absorber 3 consist essentially of a single integral unit of blow molded material.

With regard to claim 7, the forwardly projecting portion comprises a plurality of forwardly projecting crushable members (Figure 3 or 4).

With regard to claim 9, the plurality of crushable members extend outwardly from the support portion, each of said crushable members having a forwardly facing front wall, at least a pair of adjacent lobes having interconnecting front walls (Figures 1 and 2).

With regard to claim 10, the plurality of the crush means are attached longitudinally across the front of the support portion.

With regard to claim 11, the plurality of crushable members project forwardly and are spaced apart longitudinally across the support portion.

With regard to claim 12, the energy absorber comprises a thermoplastic resin.

With regard to claim 13, the thermoplastic polymer comprises a polyester resin.

With regard to claim 14 the polyester resin is a high density polyethylene.

With regard to claim 15, the polyester resin is polybutylene terephthalate.

With regard to claim 16, the energy absorber is interposed between a fascia 4 and the bumper beam, the energy absorber being attachable to the front end of the vehicle, the fascia enveloping the energy absorber and reinforcing beam such that neither component other than the fascia is visible once attached to the vehicle.

Tamada et al. lack the energy absorber extending longitudinally across the entire width of the vehicle.

Ohta (5,780,129) teaches an energy absorber adapted for attachment to a vehicle for absorbing forces generated from an impact, said energy absorber comprising a blow molded unitary structure having a rearward facing support portion R_2 and a crushable forward projecting portion R_1 adapted to crush upon impact. The energy absorber extends longitudinally across the width of the vehicle.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have provided the energy absorber of Tamada et al. to have extended across the entire width of the vehicle as taught by Ohta to provide energy absorption qualities to the entire width of the vehicle as opposed to just the left and right side portions.

Tamada et al., as modified, lacks a peripheral flange of the support portion for attaching the energy absorber to a bumper beam.

Evans et al. (4,397,490) teach an energy absorber having a support portion 13 and a peripheral flange extending around the periphery of the support portion for attaching the energy absorber to a bumper beam.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to have provided a peripheral flange as taught by Evans et al. for the support portion of Tamada et al., as modified, in order to allow the energy absorber to be attached to a bumper beam at points around the periphery of the support portion.

Response to Arguments

5. Applicant's arguments filed 6/20/05 have been fully considered but they are not persuasive.

In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

With regard to applicant's argument that Ohta does not describe nor suggest a blow molded unitary energy absorber, the examiner disagrees and believes that a blow-molded unitary energy absorber is disclosed as described above. Furthermore, with regard to the term "unitary", the examiner takes this to be defined as "of or relating to a unit" as is disclosed by Ohta.

With regard to the argument that Ohta do not disclose the bumper capable of crushing on impact, the examiner takes official notice that "bumpers" are known in the prior art to "crush" given a high enough impact force. The term "crush" is taken by the examiner to be defined as "to squeeze together into a mass". Therefore, the examiner believes the bumper of Ohta will indeed "crush upon impact" as recited.

In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992).

Art Unit: 3612

In this case, Evans et al. teach the desirability of a peripheral flange for the support portion of Ohta in order to allow the energy absorber to be attached to a bumper beam at points around the periphery of the support portion.

In response to applicant's arguments against the references (Tamada, Ohta, and Evans) individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hilary Gutman whose telephone number is 703-305-0496

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenn Dayoan can be reached on 703-308-3102. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 3612

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

8. **Any response to this action should be mailed to:**

Assistant Commissioner for Patents

Washington, D.C. 20231


or faxed to:

(703) 872-9326, (for formal communications intended for entry)

or:

(703) 746-3515, (for informal or draft communications, please clearly label

"PROPOSED" or "DRAFT").


Hilary Gutman
July 5, 2005